


```

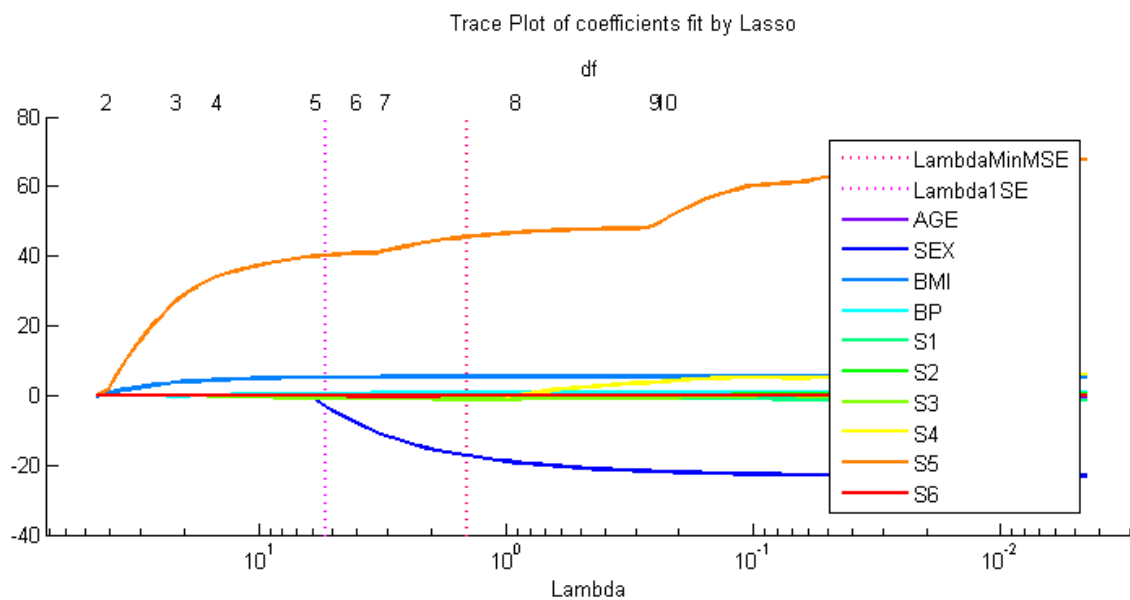
for ii = 1:numel(hlplot)
    set(hlplot(ii),'color',colors(ii,:));
end

set(hlplot,'LineWidth',2)

set(gcf,'Units','Normalized','Position',[0.2 0.4 0.5 0.35])

legend('Location','Best')

```



Important Predictors

```

lam = FitInfo.Index1SE;

isImportant = beta(:,lam) ~= 0;

disp(predNames(isImportant))

    'BMI'    'BP'    'S3'    'S5'

```

Fit a Linear Model with the Terms for Comparison

```
mdlFull = fitlm(X,y,'Intercept',false);
```

```
disp(mdlFull)
```

Linear regression model:

$$y \sim x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9 + x_{10}$$

Estimated Coefficients:

	Estimate	SE	tStat	pValue
x1	0.022296	0.22256	0.10018	0.92025
x2	-26.073	5.9561	-4.3775	1.5074e-05
x3	5.3537	0.73462	7.2877	1.5112e-12
x4	1.0178	0.2304	4.4175	1.2635e-05
x5	1.2636	0.33044	3.8239	0.00015068
x6	-1.2849	0.3468	-3.7051	0.00023877
x7	-3.0683	0.37189	-8.2505	1.9259e-15
x8	-5.508	5.5883	-0.98565	0.32486
x9	5.5034	9.4293	0.58365	0.55976
x10	0.12339	0.2788	0.44256	0.6583

Number of observations: 442, Error degrees of freedom: 432

Root Mean Squared Error: 55.6

```
disp(['Lasso MSE: ', num2str(FitInfo.MSE(lam))])
```

```
disp(['Full MSE: ', num2str(mdlFull.MSE)])
```

Lasso MSE: 3176.5163

Full MSE: 3092.896